The Artificial Urinary Sphincter for Men

This information describes an artificial urinary sphincter (AUS) and the surgery to have it placed.

About Your Urinary Sphincter

Your urinary sphincter is a muscle that controls the flow of urine out of your bladder (see Figure 1). When your urinary sphincter is contracted (closed), it blocks the opening of your bladder so urine doesn’t leak out.

![Figure 1. Urinary sphincter]

Normally, your urinary sphincter stays contracted until you choose to relax (open) it to urinate. When you relax your urinary sphincter, urine leaves your bladder.
bladder and flows through your urethra (the tube that carries urine from your bladder out of your body) and out of your body.

Some people have trouble controlling their urinary sphincter. This causes them to leak urine. This can happen after surgery to remove the prostate or radiation therapy to the prostate.

You may need an artificial urinary sphincter (AUS) if you lose control of your urinary sphincter.

**About Artificial Urinary Sphincters**

An AUS is a device that works like your natural urinary sphincter (see Figure 2). An AUS is made up of 3 parts:

- **Urethral cuff**: this wraps around your urethra to control the flow of urine. When the cuff is closed (filled with fluid), no urine can pass through. When it’s expanded (not filled with fluid), urine can pass through.

- **Pump**: this moves fluid into or away from the urethral cuff. It’s placed in your scrotum.

- **Balloon**: this holds the same fluid as the cuff. This is where the fluid is moved to when the urethral cuff is expanded. It’s placed under your abdominal (belly) muscles.

To urinate with an AUS, you must squeeze the pump in your scrotum. The pump moves fluid from the urethral cuff into the balloon, allowing the cuff to expand and your urethra to open. Your urethra stays open for 3 minutes so that you can urinate. Then, the cuff will close automatically.
An AUS is placed during a surgery.

**Risks associated with having an AUS**

Although not common, the following complications can occur:

- Pain
- Bleeding
- Infection, which can require that the AUS be taken out
- Problems with any part of the AUS, which can require surgery to take it out or replace it
- Injury to your urethra
- Ongoing leakage of urine
- Long-term or permanent problems urinating
  - You may have to insert a catheter into your bladder to drain your urine.
  - You may also need to have another surgery to fix the problem.
- The inability to hold urine until you reach a toilet
- The AUS can wear out over time and will need to be removed

**About Surgery to Place an AUS**

Your nurse will give you information about how to prepare for your surgery. Be sure to follow their instructions. Call your doctor’s office if you have any questions.

**During surgery**

You’ll get anesthesia (medication to make you sleep) before your surgery. Once you’re asleep, your surgeon will make 2 small incisions (surgical cuts):

- 1 in the space between your scrotum and rectum (the last part of your colon)
- 1 near your lower abdomen (belly)

Your surgeon will then place your AUS. Once the surgery is done, your incisions will be closed with sutures (stitches) that will dissolve on their own and won’t
need to be removed.

**After surgery**

**In the hospital**

You will wake up in the Post Anesthesia Care Unit (PACU). You will have tubes, drains, catheters, and other medical devices connected to your body after your surgery, including:

- A urinary (Foley®) catheter that will drain urine from your bladder.
- An intravenous (IV) line to give you:
  - Fluids
  - Antibiotics
  - Pain medication
  - Other medication as needed
- Inflatable boots on your legs, which help circulate blood through your legs and prevent blood clots.

These devices are usually removed before you leave the hospital. If you will leave the hospital with any of them in place, your nurse will teach you how to care for them.

**Adjusting and activating your AUS**

To keep the pump from shifting, your surgeon may show you how to pull your AUS down into the lowest part of your scrotum. If instructed, you will need to do this daily for 14 days after your surgery.

Your urine may leak from your AUS after your surgery. This is normal and will stop once the AUS has been activated by your doctor, about 6 to 8 weeks after your surgery. Call your doctor’s office to make the appointment.

**Order MedicAlert® jewelry**

Before you leave the hospital, order a MedicAlert® bracelet or necklace. Your nurse will give you an order form. Your bracelet or necklace should state the following information:

AUS: Artificial Urinary Sphincter
Medications
You may get prescriptions for the following medications before you go home:

- An antibiotic
- Pain medication
- A stool softener to prevent constipation (not being able to have a bowel movement)

You will be able to go home the day after your surgery.

At home
You can shower 48 hours after your surgery. If you have any bandages, remove them when you shower. You don’t need to put more bandages on your incisions after you shower.

If your bandages fall off or get dirty in the first 48 hours after your surgery, replace them with clean bandages.

Wear a scrotal support
For the first week after your surgery, you must wear the scrotal support that you received before you left the hospital. If the scrotal support gets wet, you will need to replace it. You can buy another scrotal support at any drug or surgical supply store.

Resuming your normal activities
You can go back to doing most of your normal activities the day after your surgery. However, wait 4 to 6 weeks to do any strenuous activities, such as:

- Working out at the gym
- Playing golf
- Riding a bicycle
- Lifting objects heavier than 10 pounds (4.5 kilograms)
Your doctor will tell you when you can resume sexual activity.

Make a follow-up appointment
See your doctor 14 days after your surgery. Call your doctor’s office to make the appointment.

Call Your Doctor or Nurse if You Have:

- A temperature of 101° F (38.3° C) or higher
- Increased bleeding or swelling
- Pain that is not relieved by your pain medication
- Severe bladder spasms
- An inability to urinate

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.